



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,920	09/14/2000	Wilson Moya	MCA-474	9899
25182	7590	12/12/2003	EXAMINER	
MILLIPORE CORPORATION 290 CONCORD ROAD BILLERICA, MA 01821			VO, HAI	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/661,920	MOYA, WILSON	
	Examiner	Art Unit	
	Hai Vo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 22 September 2003.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 2,3,9 and 11-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 2, 3, 9, 11, 12, and 14-24 is/are rejected.

7) ☒ Claim(s) 13 is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

Claim objections

1. Claim 13 is objected to because of the following informalities: The phrase "one or more layers of a porous structure" is preferably changed to -- one or more layers of a porous membrane -- to avoid the confusion and distinguish it from " the two or more layers of the porous structure" in the next line. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2, 3, 9, 12, 14-16, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Pouletty et al (US 5,288,648). Pouletty discloses an assay apparatus comprising a porous reactive filter 3, a porous support layer 4, a flow rate control layer 5 and a waste fluid receiving absorbent layer 6 (figure 1, column 3, lines 45-65). As a porous membrane, the porous reactive filter 3 is divided into a plurality of regions and each region separated by a non-porous tape 9 (figure 1, column 4, lines 1-10). Pouletty teaches different binding pair members being applied to different regions so that the presence of multiple analytes in a single sample can be simultaneously analyzed (column 4, lines 65-68). Likewise, the porous reactive filter is surface modified after the formation of the porous and non-porous areas. Pouletty also discloses one or more spots of the same binding pair member being applied per region at the same concentration (column 5, lines 6-8). Likewise, it is apparent that

the surface modification of the porous membrane can be done either before or after the formation of the porous and non-porous areas. Pouletty discloses all of the layers in register with each other (column 3, lines 48-50, column 5, lines 17-20). The porous reactive filter is made of PVDF (column 4, line 3). Pouletty discloses the It is the examiner's position that Pouletty anticipated the claimed subject matter.

4. Claims 2, 3, 9, 11, 12, and 14-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Moya et al (US 5,271,839). Moya discloses a patterned porous filtration structure comprising two porous patterned sheets 80 and 86 and a layer 92 of non-porous material being disposed between two porous patterned surfaces 80 and 86 (figure 14, column 3, lines 5-10). Figure 14 shows that one area of porous material surrounded by one area of non-porous material along an outer periphery of the porous material. The porous material is in a shape of ovals. The porous membrane is made of PVDF (column 7, line 40). The porous membrane is surface modified before the formation of the porous and non-porous areas (column 3, lines 25-45). The porous membrane is surface modified after the formation of the porous and non-porous areas (column 9, lines 55-67). Moya discloses that different reagents are introduced into wells 66, 68, 70 and 72 so that the sample is reacted with different reagents simultaneously. Likewise, it is apparent that such reagents serve as either negative or position charged coatings so as to react with the sample. It is the examiner's position that Moya anticipated the claimed subject matter.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 2, 3, 9, 12, 14, and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,627,291. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-10 of Patent No. 6,627,291 disclose the presently claimed subject matter with additional limitations of relative height of the areas of porous material and the areas of non-porous material.

Allowable Subject Matter

7. Claim 13 would be allowable if rewritten to overcome the objections above. None of the prior art teaches or suggests the patterned porous structure wherein the porous structure is formed of two or more layers and each of the layers have one or more arrears of porous material and one or more areas of non-porous material formed therein and the areas of the porous and non-porous material vary from layer to layer.

Response to Arguments

Art Unit: 1771

8. The art rejections over FR 233 626 and EP 272 043 have been overcome by the present amendment and response (see pages 5 and 6 of the amendment filed on 09/22/2003).
9. Applicant's arguments with respect to claims 2, 3, 9, 11, 12, and 14-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on M,T,Th, F, 8:30-6:00 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV

Hai Vo
Tc 1700